MATERIAL SAFETY DATA SHEET

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier M101 - DEEP CLEAN

Product Use

BIOLOGICAL BASED HARD SURFACE CLEANER & DEGREASER

Manufacturer's Name

PINELAND ENVIRONMENTAL TECHNOLOGY

Street Address Unit B41 Pinelands Business Park

New Mill Road Pinelands

Postal Code **Emergency Telephone**

7450 082 924 5791

Date MSDS Prepared MSDS Prepared By Phone Number 01 MARCH 2013 DONAVIN HAWKÉR 021 531 3749

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Ingredients (specific) | % | CAS Number/Reach Reg no. | LD 50 of Ingredient (specify species and route | LC 50 of Ingredient (specify species) |
|---|-------------|-----------------------------|--|---|
| Water | 88 – 92 | 7732-18-5 | N/A | N/A |
| Alkyl ether sulphate C12 – C14 sodium salt | 2 - 3 | 68891-38-3 | >2000 mg/kg OECD 401 | <= 100 mg product/L (Fish) EC0 > 100 mg/L (Bacteria) |
| C6 Alkyl Glucoside | 1.5 – 3 | 259-21-6 | N/A | 420 mg/L (fish) |
| C10 Alcohol ethoxylate | 1 – 2.5 | | | 10 – 100 mg/L (fish) |
| L-Glutamic acid, N,N diacetic acid tetrasodium salt (GLDA-NA ₄) | 0.93 - 0.98 | 51981-21-6 | N/A | Unavailable |
| EDTA | <0.5 | 64-02-8 | N/A | N/A |
| Viable bacterial cultures | <0.5 | | N/A | N/A |

Ingredients not listed are either nonhazardous or under reportable conditions

SECTION 3 — HAZARDS IDENTIFICATION

CAUTION

Emergency Overview

Contact may cause eye & skin irritation

Physical State Liquid **Odor** None **Appearance** Opaque

Potential Health Effects

Principal routes of exposure Eye contact, skin contact, ingestion

Acute effects

Eyes May cause irritation

Substance may cause slight skin irritation Skin Inhalation May cause irritation of respiratory tract

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting &

diarrhea

SECTION 4 — FIRST AID MEASURES

Skin Contact

In case of contact with skin, wash immediately with plenty of water

Eye Contact

In case of eye contact, rinse immediately with plenty of water & seek medical advise

Inhalation

Move to fresh air

Ingestion

Clean mouth with water & afterwards drink plenty of water

Notes to physician

Treat symptomatically

SECTION 5 — FIRE FIGHTING MEASURES

Flammable Properties Not flammable

Unsuitable extinguishing media None

Hazardous combustion products

Thermal decomposition products may release toxic and/or hazardous fumes and gases

including nitrogen dioxides, carbon dioxides, ammonia & sodium hydroxide

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautions For personal protection, see section 8

Environmental precautions Spilled preparation should be removed immediately to avoid formation of dust from dried preparation.

Take up by mechanical means preferably by vacuum cleaner equipped with a high efficiency filter. Flush remainder carefully with plenty of water. Avoid splashing and high pressure washing (avoid formation of

aerosols). Ensure sufficient ventilation. Wash contaminated clothing

Method for cleaning up Avoid formation of dusts & aerosols

Spilled preparation should be removed immediately to avoid formation of dust from dried preparation. Take up by mechanical means preferably by vacuum cleaner equipped with a high efficiency filter. Flush

remainder carefully with plenty of water. Avoid splashing and high pressure washing (avoid formation of

aerosols). Ensure sufficient ventilation. Wash contaminated clothing

SECTION 7 — HANDLING AND STORAGE

Handling Ensure adequate ventilation

General precautionsThe substance should be handled under conditions of good industrial hygiene & in conformity with any local

regulations in order to avoid unnecessary exposure

Storage Keep tightly closed in a dry & cool place

Temperature Keep in a cool, dry & well ventilated place

Storage conditions In unbroken packaging – dry & protect from the sun. The product has been formulated for optimum stability.

Extended storage or adverse conditions such as higher temperatures or higher humidity may lead to a

higher dosage requirement

Conditions to avoid Avoid temperatures above 45C to preserve biological stability. Avoid freezing temperatures. Strong acids or

alkali compounds may inactivate biological cultures. Avoid strong oxidizing agents.

Incompatible materials Strong acids or alkali compounds may inactivate biological cultures

SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

Occupational exposure controls

Engineering Controls Ensure adequate ventilation, especially in confined areas

Maintain good conditions of industrial hygiene. Some processes may require enclosures, local

exhaust ventilation or other engineering controls to control airborne levels. Additional handling

and health/safety information is available on request.

Personal protective equipment

Respiratory Protection In cases of insufficient ventilation wear suitable respiratory equipment that meets HEPA/P100

specifications.

Eye protection Safety glasses with side-shields

Skin protection Long sleeved clothing

Hand protection Protective gloves

General hygiene considerations Handle in accordance with good industrial hygiene and safety practices

Environmental exposure controls Local authorities should be advised if significant spills cannot be contained

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Appearance Opaque Physical state Liquid Odor Not apparent

Ha 8.0-9.5

Boiling point/Range No information available Melting point/Range No information available Flash point No information available Flammability (solid/gas) No information available **Explosive properties** No information available **Oxidising properties** No information available Vapor pressure No information available Relative density No data available Solubility No information available Partial Coefficient (noctanol/water) No information available

SECTION 10 — STABILITY AND REACTIVITY

Chemical Stability Stable under recommended storage conditions

Conditions to avoid Stable under normal conditions

Excessive temperature variations below 0C or above 45C.

Materials to avoid None

Hazardous decomposition products None

Possibility of Hazardous reactions None

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute Toxicity

Ingestion, LD50 Rat oral (mg/kg)

Not determined

Not determined

(mg/l/4hr)

Skin, LD50 Rat dermal (mg/kg)

Eye Irritation

Not determined

Not determined

Chronic Toxicity

Sensitization According to our experience and the information provided to us, the product does not have any

harmful effects if used and handled as specified

This product is formulated using a range of microorganisms specially selected from the natural environment

SECTION 12 — ECOLOGICAL INFORMATION

Ecotoxicity

This product is not expected to pose an environmental hazard. No toxicity data is available specifically for soil organisms, plants & terrestrial animals

Environmental Effects The data available do not support any environmental hazard

Persistence/Degradability The organic compounds of the product are biodegradable

Bioaccumulative effect According to experience, not expected

Other adverse effects No known effect

SECTION 13 — DISPOSAL CONSIDERATIONS

Waste disposal method Dispose of contents in accordance with local regulation

Contaminated packaging Dispose of wastes in an approved waste disposal facility

SECTION 14 — TRANSPORT INFORMATION

Transport Regulations Not dangerous goods

IMDG/IMO Not regulated
RID Not regulated
ADR Not regulated

ICAO Not regulated

IATA Not regulated

DOT Not regulated

SECTION 15 — REGULATORY INFORMATION

| International Inventories | | |
|---------------------------|-----------------|--|
| TSCA | Does not comply | |
| PICCS | Does not comply | |
| KECL | Does not comply | |
| ENCS | Does not comply | |
| CHINA | Does not comply | |
| AICS | Does not comply | |
| DSL/NDSL | Does not comply | |

SECTION 16 — OTHER INFORMATION

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information & belief at the date of publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text. Furthermore, as the conditions of use are beyond the control of Pineland Environmental Technology, it is the responsibility of the customer to determine the conditions of safe use of these products.

